## XI.—A new Bee from Natal,

bу

## T. D. A. Cockerell, University of Colorado.

I HAVE just received from Mr. E. C. Chubb, specimens of a bee of such extraordinary beauty that it deserves to be recorded without delay. It reaches me on the very day that we have received word of the complete triumph of the allied armies in Europe, and the cessation of fighting. Because of its splendid blue colour of the abdomen I call it collectina, heavenly; may it be an omen of better days to come!

## ANTHOPHORA CŒLESTINA, sp. nov.

- Q. Length about 13 mm., anterior wing 9 mm.; robust, black, with white markings on the head as follows: a reversed T-shaped mark on clypeus, the arms very long, the stem not reaching upper border of clypeus; a transverse supra-clypeal band; a very broad crescentic mark on labrum; and nearly all of base of mandibles. Hair of head and thorax above pale fulvous mixed with black, of lower part of cheeks pure white, of under side of thorax yellowishwhite; antennæ entirely black, third joint very long; tegulæ brownish ferruginous; wings strongly dusky, nervures piceous; legs black, the hair on outer side white, but hind tibiæ with a band of black hair running down in the midst of the white, and brush at end of hind basitarsi black; inner face of tibiæ with black hair; inner face of hind basitarsi with reddish-black hair; abdomen with pale fulvous hair at extreme base, and black hair at extreme apex; black patches also at the sides of the first four segments, and much white hair at sides, especially of fifth; otherwise the abdomen above is covered with splendid bright blue shining scale-like hairs, from the apical band of first segment to the apex of fourth, segments two to four with bands where the blue is thin across the middle.
- ¿. Similar but somewhat smaller; the sides of the face with large white triangular areas; the labrum nearly all white; scape with a white mark in front; third antennæ joint not as long as the next three together; hair of thorax more strongly fulvous; no black stripe on the white hair of outer side of hind tibiæ; base of second abdominal segment nude and therefore black; apex of abdomen bi-dentate, the teeth wide apart.

♀ (type) from Durban, Natal, 2nd April, 1918 (C. N. Barker). ♂ with same data, except that it is 16th March, 1918.

There are in Africa several species of *Anthophora* with more or less blue colour on the abdomen, namely:

Anthophora cincta, Fabricius. Congo, etc.

,, cærulea, Friese. Central Africa.

vivida, Smith. (with variety guinea, Strand). Congo.

,, analis, Dours. Congo, etc.

aerizusa, Vachal. Sierra Leone.

,, expleta, Vachal. Belgian Congo.

" vividula, Strand (with variety conradsi, Strand).
Central Africa.

Of these, I possess the first four, and all are quite distinct from A. cælestina. The remaining three, known to me only by descriptions, are also very distinct. From all of these, A. cælestina is especially known by the almost entirely blue abdomen, and the brilliance of the blue. Friese (Deutsch. Ent. Zeitschr., 1915, p. 290) states that he has seen a female, A. cærulea, from Natal, collected at Durban, and belonging to the Cape Museum. Does A. cærulea occur at Durban, or did he possibly see a worn specimen of cælestina? As Friese gives a very wide distribution for cærulea, it is possible that it is composite; I will therefore designate Sierra Leone, the first locality cited, as the type locality.

The following key will assist in the separation of the species:

Hair of thorax mixed green and black; abdominal bands shining emerald green (Tero Forest, Uganda, July, 1912, C. C. Gowdey; compared with type by Meade-Waldo) . . . . cincta (Fabr.).

Hair of thorax mixed blue and black, posteriorly all black; abdomen with blue bands, not shining, on hind margins of segments, but only a vestige on first (Bugoma and Budongo Forests, Uganda, S. A. Neave; compared with type by Meade-Waldo) . . . . vivida, Smith.

Similar to *vivida*, but hair of thorax mixed whitish and black, the effect gray; abdomen with dull pale blue bands, and scattered blue scale-like hairs over the surface, first segment with a band; tegulæ piceous (my specimens from the interior of Benguella) . . . . *cærulea*, Friese.

Large and dark, abdomen bluish or bluish-white when fresh, but easily denuded; hind legs of female with black hair, except a white pencil at end of tibiæ (Cameroons, A. Diehl) . . . . analis, Dours.